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	ВА	WIPO	WO 95/05042			02/1995	T	
	ВВ	EPO	EP 0 529 421 A2		· · · · · · · · · · · · · · · · · · ·	03/03/93	·	
	ВС	WIPO	WO 93/09617			05/13/93		
	BD	WIPO	WO 95/03656 A1	İ		02/95		
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Exam. Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	Leonard J. Cimini, Jr., "Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing," Jul. 7, 1985, IEEE Transactions on Communications, vol. COM-33, No. 7	
	СВ	John A.C. Bingham, "Multicarrier Modulation for Data Transmission: An Idea Whose Time Has Come," May 1990, pp. 5-14	
	cc	Chow et al., "DMT Initialization: Parameters needed for Specification in a Standard," Mar. 1993, pp. 1-8, T1E1.4, ANSI Standards Committee (Submission T1E1.4/93-0222).	
	CD	Chow et al., "A Discrete Multitone Transceiver System for HDSL Applications," IEEE Journ. on Sel. areas in Comm., vol. 9, No. 6, Aug. 1991, pp. 895-908	
I =	CE	Chow et al. "Equalizer Training Algorithms for Multicarrier Modulation." (1993), pp. 761-765	
(CF	Kirkman et al., "Detection of Characteristic Phases Using FFT's," International Conference on Acoustics, Speech and Signal Processing IEEE, 3/92	
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Examiner Signature	date	Date Considered	5,28,04

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¹Unique citation designation number. ²Applicant is to place a check mark here if English Translation is attached.

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			NON PATENT LITERATURE DOCUMENTS	
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	XV.		Proakis, <u>Digital Communications</u> , 2d ed. (McGraw-Hill, Inc., 1989), pp. 396-99 and 862-65.	
			Cioffi et al., "DMT Specification Overview for ADSL", Submission Tiel.4/93-083 to the Tiel.4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (April 15, 1993).	1
			Cloffi et al., "Detailed DAT Transmitter Description for ADSL", Submission TIE1.4/93-084 to the TIE1.4 Working Group of Committee T1, sponsored by the Alliabce for Telecommunications Information Solutions and accredited by the American National Standards Institute (April 15, 1993)	1
~ ₉ ,,		R G.	Thow et al., "Recommended Reverberation Training Sequence- evision 1", Submission TIEL:4/93-086-R1 to the TIEL:4 Working roup of Committee T1, sponsored by the Alliance for elecommunications Information Solutions and accredited by the merican National Standards Institute (May 10, 1993).	
.>	0	Ci Cc 21 fo	offi et al., "Recommended Training Sequence for SNR mputation with DMT ADSI,", Submission T1E1.4/93-087 to the E1.4 Working Group of Committee T1, sponsored by the Alliance of Telecommunications Information Solutions and accredited by a American National Standards Institute (May 10, 1993).	•

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1 Applicant's unique citation designation number (options!). 2 Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO Complete If Known Application Number 10/074,942 INFORMATION DISCLOSURE Filing Date February 11 2002 STATEMENT BY APPLICANT First Named Inventor Aslanis Art Unit 2534 (Use as many shoets as necessary) Examiner Name Le 2 Attorney Dooket Number TI-27730A11A

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	. No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
(IB		Cioffi et al., "Modification to DMT Synchronization Pattern Insertion", Submission T1E1.4/93-089 to the T1E1.4 Working Group of Committee T1, sponsored by the Alliance for Tele-communications Information Solutions and accredited by the American National Standards Institute (April 15, 1993)
		Chow, "Recommended Reweille Sequence for DMT ADSL", Submission T181.4/93-114 to the T181. 4 Working Group of Committee T1, sponsored by the Alliance for Telecommunications Information Solutions and accredited by the American National Standards Institute (May 10, 1993).
/	<u> </u>	Bingham, "Proposed Standard: Sections 6.6-6.10 & 7.6-7.10 Encoders, Modulators, Cyclic Prefices, DACs, and Anti-aliassing Filters", Submission, TIE1.4/93-120 to the TIE1.4 Working Group of Committee T1, sponsored by the Alliance for Tele- communications Information Solutions and accredited by the American National Standards Institute (May 10, 1993).
U		"Asymmetric Digital Subscriber Line (ADSL) WORKING DRAFT Standard", Marshall, ed., (TIE1.4 Working Group of Committee T1, November 15, 1993).

Examiner Date 05.28.09 Signature Considered

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